

MO/PETP and the Auto Industry



A Review for the Missouri Air Conservation Commission

April 28, 2005

MO/PETP Overview



- The Missouri Performance Evaluation Test Procedure (MO/PETP) requirements were implemented to maintain the integrity of local air quality by regulating gasoline fueling emissions (VOCs).
- MO/PETP requires assembly plant fueling operations to achieve and maintain 95% overall control of VOCs.

VOC = volatile organic compound

MO/PETP Considerations



- The MDNR and the Automotive Industry have come to agreement that the current MO/PETP standard should not apply to assembly plant automobile fueling operations:
 - No realized air quality benefit
 - Emissions are already controlled pursuant to the Clean Air Act
 - Extensive data supports our conclusions
 - Excessive cost for minimal emission contributor
- The MDNR and the Automotive Industry are working together to develop a procedure which continues to ensure the control of fueling emissions in assembly plants, and that is specific and meaningful to the operation.

MO/PETP and Assembly Operations - No Air Quality Benefit



- No realized air quality benefit
 - Assembly plant fueling operations (from storage tanks to fueling the vehicle) are always controlled and very minimal.
 - Typically 0.5 to 2 tons per year of VOC, or approximately 0.1% of the total typical assembly plant emissions.
 - Implementation of the MO/PETP rule has not resulted in further emission reductions, i.e., there has been no realized air quality benefit as a result of this rule.

MO/PETP and Assembly Operations - Clean Air Act Title II and ORVR



- The control of vehicle fueling emissions is already mandated by the Clean Air Act
 - Title II of the Clean Air Act requires the control of vehicle fueling emissions by the use of Onboard Refueling Vapor Recovery (ORVR) canisters.
 - ORVR systems are installed on the vehicles and must meet 95% control. U.S. EPA mandates extensive testing of the systems and requires approval of the results. Actual ORVR test data demonstrates greater than 99% control.
 - ORVR systems were introduced on passenger vehicles in 1998 and are now in place on 94% of all vehicles assembled in Missouri. This number will likely increase an additional 2% by June 2006.

MO/PETP and Assembly Operations - Test Data Support



■ Extensive data supports our conclusions

- Years of test data have repeatedly demonstrated that U.S. EPA data is representative of MO/PETP compliance and an overall 95% control of VOC is consistently achieved in facilities fueling ORVR-equipped vehicles. Further testing would provide no additional benefit/insight.
- Facilities fueling both ORVR and non-ORVR vehicles can still meet 95% overall control with the use of “Stage II” incineration.

MO/PETP and Assembly Operations - Testing Costs Extensive

- Excessive Costs for Minimal Emission Contributor

	<u>Total Costs (to date)¹</u>	<u>Cost/Ton</u>
GM ²	\$1,000,000	\$1,474,338
DCC (2 facilities)	\$750,000	\$473,469
Ford	\$219,000	\$438,000

- The automotive industry has provided substantial resources thus far
- The validity and relationship between EPA testing and Missouri MO/PETP has been confirmed.
- MDNR agrees that further testing would be an unreasonable cost burden. This follows EPA's recent initiative to evaluate test costs in relation to environmental benefit.

¹ Internal labor and parts costs not included

² GM costs include two Mo/PETP tests and CARB Certification in 1997

ORVR and Emission Testing in Other States

- Other state agencies, even in areas of lesser attainment, have embraced that ORVR systems are very effective in controlling emissions and accept EPA test results in lieu of any additional testing:
 - Michigan
 - Delaware
 - Ohio
 - Illinois
 - Indiana
 - Georgia
 - Oklahoma

MO/PETP testing creates economic disadvantage in Missouri

Considerations: Assembly Plants vs. Gas Stations

- Gas stations are also regulated by MO/PETP.
- Assembly Plant fuel fill operations differ from traditional gas station operations:
 - Vehicles not mixed
 - Fill rate is fixed
 - Fueling method is fixed
 - Fuel quantity is fixed
 - Fuel temperature is fixed
 - Control system is known and unchanging
 - OSHA Worker safety/comfort considerations

Summary



- Emissions from fuel fill operations at assembly plants should be regulated in an environmentally meaningful fashion.
- Rule change is needed to exclude assembly plant initial fill operations from MO/PETP testing. MDNR and the Auto Industry are committed to working cooperatively towards meaningful rule change.
- A Variance is requested as an interim measure until the rule change process is complete.